

```
1 package semaphore.trafficLight.control;
2
3 import java.util.Timer;
4
5
6
7
8 public class SimpleTrafficLightControl implements TrafficLightControl {
9
10     public static enum State {
11         GREEN, YELLOW, RED, ALERT, OFF
12     }
13
14     State state = State.OFF;
15
16     private final TrafficLight trafficLight;
17
18     public SimpleTrafficLightControl (TrafficLight trafficLight)
19     {
20         this.trafficLight = trafficLight;
21     }
22
23     @Override
24     public void turnAlert() {
25
26         stopAlert();
27         configureAlert();
28     }
29
30
31     private Timer alertTimer;
32
33     private void configureAlert() {
34
35         trafficLight.spotGreen().turnOff();
36         trafficLight.spotYellow().turnOff();
37         trafficLight.spotRed().turnOff();
38
39         state = State.ALERT;
40
41         final long blinkTimer = 1000;
42         alertTimer = new Timer();
43
44         alertTimer.scheduleAtFixedRate(new TimerTask() {
45
46             @Override
47             public void run() {
48                 if (trafficLight.spotYellow().isOff())
49                     trafficLight.spotYellow().turnOn();
50                 else
51                     trafficLight.spotYellow().turnOff();
52             }
53         }, 0, (long) blinkTimer);
54     }
55
56     private void stopAlert() {
57         if (alertTimer != null) {
58
59             alertTimer.cancel();
60             alertTimer = null;
61
62         }
63     }
64
65     @Override
```

```
66     public void turnGreen() {
67
68         stopAlert();
69         trafficLight.spotGreen().turnOn();
70         trafficLight.spotYellow().turnOff();
71         trafficLight.spotRed().turnOff();
72         state = State.GREEN;
73     }
74
75     @Override
76     public void turnYellow() {
77
78         stopAlert();
79         trafficLight.spotGreen().turnOff();
80         trafficLight.spotYellow().turnOn();
81         trafficLight.spotRed().turnOff();
82         state = State.YELLOW;
83     }
84
85     @Override
86     public void turnRed() {
87
88         stopAlert();
89         trafficLight.spotGreen().turnOff();
90         trafficLight.spotYellow().turnOff();
91         trafficLight.spotRed().turnOn();
92         state = State.RED;
93     }
94
95     @Override
96     public void turnOff() {
97
98         stopAlert();
99         trafficLight.spotGreen().turnOff();
100        trafficLight.spotYellow().turnOff();
101        trafficLight.spotRed().turnOff();
102        state = State.OFF;
103    }
104
105 }
106
```